

a slot longitudinal direction with an axial directional component,
a slot transverse direction with a radial directional component,
said slot longitudinal direction and said slot transverse direction being defined
by a center plane between said walls; and

an electric winding with a plurality of winding parts that extend in said slot
longitudinal direction and arranged in each of said slots,

at least some of said plurality of winding parts being located radially displaced in
relation to one another,

said electric winding having

an electric conductor configured to hold a high voltage, at least one full
winding turn of said electric conductor being configured to confine an electric field in said
electric conductor, wherein

at least one pair of adjacently located winding parts in a same slot being displaced in
the circumferential direction relative to each other.

19. A rotating electric machine according to claim 18, wherein:

said at least one pair of adjacently located winding parts being a radially innermost
part of an outer winding part and located radially inside an outermost part of an inner winding
part.

20. A rotating electric machine according to claim 18, wherein:

at least two pairs of said at least one pair of adjacently located winding parts in said
same slot being displaced in the circumferential direction in relation to each other and having
a displacement being greater the further outwards, in said radial direction, the winding parts
are located.

21. A rotating electric machine according to claim 18, wherein:

at least one of said plurality of slots having a directional component in said
circumferential direction of said magnetic core along at least part of said slot transverse
direction.

22. A rotating electric machine according to claim 21, wherein:

at least one of said plurality of slots being at least partially curved in said transverse

direction.

23. A rotating electric machine according to claim 22, wherein:
each of said plurality of slots being curved along said transverse direction, and
each of said plurality of slots having a same radius of curvature.

24. A rotating electric machine according to claim 18, wherein:
said plurality of slots being parallel in both said longitudinal direction and said
transverse direction.

25. A rotating electric machine according to claim 18, wherein:
at least one of said plurality of slots having an increased width outwards along said
transverse direction.

26. A rotating electric machine according to claim 18, wherein:
at least one of said plurality of slots having a constant width in said transverse
direction.

27. A rotating electric machine according to claim 18, wherein:
at least one of said plurality of slots having in said transverse direction alternating
larger width portions and alternating smaller width portions.

28. A rotating electric machine according to claim 27, wherein:
at least one of said alternating larger width portions having a varying width.

29. A rotating electric machine according to claim 27, wherein:
said alternating larger width portions having a mutually similar width.

30. A rotating electric machine according to claim 18, wherein:
said at least one full winding turn of said electric conductor being flexible.

31. A rotating electric machine according to claim 18, wherein:
said electric conductor having

an inner semiconducting layer surrounding said electric conductor,
an insulating layer surrounding said inner semiconducting layer, and
an outer semiconducting layer surrounding said insulating layer.

32. A rotating electric machine according to claim 31, wherein:
each of said inner semiconducting layer and said outer semiconducting layer
constitutes an equipotential surface.

33. A rotating electric machine according to claim 32, wherein:
said inner semiconducting layer, said insulating layer, and said outer semiconductor
layer adhere to one another along a full turn of the electric winding, and
said inner semiconducting layer and said outer semiconducting layer having a
substantially same coefficient of thermal conductivity as said insulating layer.

34. A rotating electric machine according to claim 31, wherein:
said inner semiconducting layer, said insulating layer, and said outer semiconductor
layer being dimensioned to hold a voltage in said electric conductor being greater than 72 kV.

35. A rotating electric machine comprising:
a magnetic core with a center axis that defines
an axial direction of said magnetic core,
a radial direction of said magnetic core, and
a circumferential direction of said magnetic core,
said magnetic core having a plurality of slots, each of said plurality of slots having
walls,
a slot width being a distance between said walls,
a slot longitudinal direction with an axial directional component,
a slot transverse direction with a radial directional component,
said slot longitudinal direction and said slot transverse direction being defined
by a center plane between said walls; and
an electric winding with a plurality of winding parts that extend in said slot
longitudinal direction and arranged in each of said slots,
at least some of said plurality of winding parts being located radially displaced in